

Name of Capital Programme: e-Learning		
Name of Lead Institution: Lancaster University		
Name of Proposed Project: Personalisable Lifelong Learning User Group Software (PLLUGS)		
Name of Project Partners: Sakai Foundation		
Full Contact Details for Primary Contact:		
<p>Name: Prof R. Crouchley Position: Director of e-Science Email: r.crouchley@lancaster.ac.uk Address: Centre for e-Science Bowland Annex Lancaster University Lancaster LA1 4YW Tel No: 01524 593161 Fax No:01524 594459.</p>		
Length of Project: 24 months		
Project Start and End Dates: Sept 06-Aug 08		
Total Funding Requested from JISC: £199,924		
Funding Broken Down over Project Years: Total 2006/7=£97,664,; Total 2007/8=£156,577		
Total Institutional Contributions: £54,316		
Outline Project Description.		
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I have read the Circular and associated Terms and Conditions of Grant at Appendix B (Tick Box)	YES ✓	NO

Personalisable Lifelong Learning User Group Software (PLLUGS)

(1) Introduction

The main aim of this proposal is to provide a personalise-able version of Sakai configured with appropriate e-collaboration tools for distance lifelong learning. The project will be a two year, three-way, technology-focused collaboration between Lancaster University's Centre for e-Science (LUCeS), Lancaster's School of Lifelong Learning and Widening Participation ([School of LLL&WP](#)), and the Sakai Foundation based at the University of Michigan. To ensure that the envisaged development is of true value to the lifelong learning community, we will acquire user requirements, define use cases, develop tools and demonstrate their use in the Creative Writing (CW) courses from the [School of LLL&WP](#). These CW courses are student centric. For more details on this learning community see Appendix 1. **Text removed – Section 43 (Commercial Interests)**

. Tailoring will be effected by the plugging-in of service based tools, so that the collaboration and course management tools that come with Sakai (Discussion, Chat, Dropbox, Resources, Tests & Quizzes) will be able to sit seamlessly alongside our own social software suite of Sakai e-collaboration tools (blog, whiteboard, shared desktop, video/audio conferencing). **Text removed – Section 43 (Commercial Interests)**

. All the tools/services developed in this project will be made available to UK educational and world wide Sakai Communities.

(2) Project description

To set the scene we present two CW student scenarios:

Exchanging Feedback on Creative Writing materials

1. Student logs in to Sakai
2. Peers enter a joint worksite to discuss their various CW materials
Student shares their own CW material (as written on their home PC) with their CW group,
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3. If peers agree to reconvene, they go back to step 2. If the User decided to submit their course work, process ends.

Interacting with the CW course Tutor

1. Student logs in to their CW group
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2. Student returns to their desktop environment to work offline on their coursework
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Current students and tutors on the Creative Writing courses use the Lancaster University Virtual Learning Environment (LUVLE), which is a version of Lotus Domino. LUVLE has available the standard VLE features, these include discussion, instant messaging, personal profile pages, learning logs, materials depository including mount for streamed media and assignment submission tools. In addition, the Creative Writing courses make use of a specially developed online workshop, designed for activities intended to stimulate ideas and playing with words; they have also recently begun to make use of a Wiki. Much of the first use case detailed above is possible within LUVLE (but only via text exchange); **Text removed – Section 43 (Commercial Interests)**

. In PLLUGS both use cases will be possible **Text removed – Section 43 (Commercial Interests)**

We will measure the value added and appropriateness of PLLUGS by randomly assigning different groups of students at different times to either LUVLE or to PLLUGS and analyse and report on their experiences. There will be at least 30 students in each group at any one time. More information about LUVLE can be found from <http://domino.lancs.ac.uk/>. Sakai (<http://www.sakaiproject.org>) is now the leading example of a Java collaboration framework. Sakai itself is open source, and has evolved from the CHEF (Comprehensive Collaborative Framework) suite of tools from University of Michigan. Sakai is widely used in the US for online learning and collaboration and has recently been adopted by the Open University in South Africa. It has a service-based architecture and leverages many standards such as, amongst others, web services (SOAP, WSDL, etc), RSS feeds, webDAV, IMS QTI and the Open Knowledge Initiative's Open Service Interface Definitions (OSIDs, see <http://web.mit.edu/oki/>). Sakai was initially developed with seed funding from the Mellon Foundation and can be extended for a variety of purposes. For further details on Sakai please see Appendix 2.

The project will run in 2 phases. Phase 1 will run from Sept 2006 until Jan 2007. This phase will undertake a requirements analysis for the CW tutors and students. During this phase current CW students and tutors will be interviewed about their experiences of tools that are presently available to them for supporting interaction and learning dialogue. This will lead to requirements for improvements to existing tools and a close integration of these tools into a consistent, user-friendly portal environment. **Text removed – Section 43 (Commercial Interests)**

It is also expected that new software requirements and change requests for the current tools will be generated in this phase.

The project is organised into 6 work packages.

WP1: Text removed – Section 43 (Commercial Interests)

Sakai is a web application, delivered over the Internet and accessed primarily via a web browser. **Text removed – Section 43 (Commercial Interests)**

This work package will take advantage of this web service layer **Text removed – Section 43 (Commercial Interests)**

, giving the following deliverables:

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Related deliverables:

D1e A document titled ‘**Software Requirements for Personalised access to Sakai tools and Services for Creative Writing**’. This will be the result from the initial mapping of the field and development of use cases involving both CW tutors and students carried out during Phase 1 of the project. This is considered a deliverable as it is expected to be widely applicable to any course with a networked learning or distance component.

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WP2: Text removed – Section 43 (Commercial Interests)

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WP3: Production Quality e-Collaboration Tools (Social Software) for Sakai

Staff in the Lancaster University Centre for e-Science (LUCeS) are working on prototype collaboration tools for use within the Sakai framework as part of the JISC Sakai VRE demonstrator project. The e-Collaboration tools are as follows:

Distributed Whiteboard. The distributed whiteboard will allow learners to collaboratively work on drawings etc with other learners in the same group. Students will be able to draw multicoloured shapes, post-it notes, lines and arrows. They will also be able to place images from your PC onto the drawing, which could then be annotated with a post-it. The only technical requirements for the learner are a web browser and a Java Plug-in, freely available as a download from the Sun Microsystems website.

Shared Desktop. The shared desktop will allow a learner to share the desktop from their PC, over the Internet, for other learners in the group to view. A learner could use this to demonstrate the use of some software to another learner in the group, or it could be used as a collaborative document-editing tool.

Conferencing. Using the conferencing tool, a learner will be able to initiate either an audio or a videoconference with other learners from the same group. The conferencing tool is easy to install and configure, with a simple Windows installer, and features a user-friendly interface. Each learner who wants to use the conference tool needs a web cam and a headset. If not available these can be purchased for around £40 in total.

Blogger. The blogger tool allows learners to make persistent notes in the form of a journal. Each learner can create their own private journal or they can create a shared journal, accessible to all of the learners in that learner group. The blogger makes it easy to create flows of text, images and hyperlinks. Each entry can be edited at any time, by any learner (in the shared model). Use of this facility, in a group learning context, means that a persistent representation of the group’s or individual’s thoughts and ideas is kept for as long as it is required.

These prototype tools were developed as part of the JISC funded Sakai VRE Demonstrator Project and were demonstrated at the Dec 2005 Sakai Conference, see <http://bugs.sakaiproject.org/confluence/pages/viewpage.action?pageId=9608>. The tools are due to be released to the Sakai community in winter 2006. We have included these tools here as they may need some additional work in this context for e-learning. The blogger was released early and is already in use by several institutions. We are confident that all our tools will be taken up and used for many years by the wider Sakai community. Furthermore, many large

US institutions have adopted Sakai, so there is very little chance of our tools/services and Sakai not surviving beyond 2010. This gives deliverable:

D3 Production quality e-collaboration tools (social software) for Sakai

We will investigate the possibility of decoupling these tools from Sakai and make them generally available for use in other SOAs or as stand alone social software.

WP4: Community, Documentation, Training and Awareness Resources

Documentation, Training and Awareness Resources

This work will focus on the creation of material to help guide a CW student in the most effective use of PLLUGS. This will include documentation, tutorials (15 – 60 mins), walkthroughs and guidance on how to use PLLUGS. We will also provide training materials on the use of PLLUGS for the CW tutors. **Text removed – Section 43 (Commercial Interests)**
The topics will include: PLLUGS Overview, Chat Tool, Resources Tool, **Text removed – Section 43 (Commercial Interests)**

D4a Online Tutorials. Online tutorials for tutors and students on the using of PLLUGS based on a set of use case scenarios obtained from the requirements analysis in Phase 1 and early user trials.

Community

There already exists an active community of developers and educational technologists who use Sakai in the UK. Participants in other JISC-funded projects who are interested in using our Sakai e-collaboration tools will be invited to join this community. The main aim of such a community will be to ultimately allow the UK developers to play a recognisable part in the wider Sakai development community. We will also be working closely with the overseas Sakai developers and the Sakai Foundation. Conditional on the limited resources available, we will make PLLUGS available to the participants in the current call so that we can obtain some feedback on the cross-institutional use of e-learning for lifelong learners. We will also run a workshop on Personalisation and Off-line-ability in e-learning at the end of the project. This gives deliverables:

D4b Programme access to PLLUGS

D4c Active UK participation in the development of Sakai

D4d Workshop on Personalisation and Off-line-ability in e-learning

WP5: Comparison of PLLUGS with Lancaster University Virtual Learning Environment (LUVLE)

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in our case studies. This approach is straightforward and simple to apply. The core of the procedure involves 1st identifying the most relevant values or criteria that are appropriate to the CW students. This is likely to involve assessing: **Text removed – Section 43 (Commercial Interests)**

By doing so systematically, **Text removed – Section 43 (Commercial Interests)** we can compare PLLUGS with LUVLE on many different dimensions and overall. **Text removed – Section 43 (Commercial Interests)**

. The comparison will, in the language of the call, “analyse areas in which the project has been more and less successful, highlighting the implications and challenges of implementing e-learning to support cross-institutional delivery of lifelong learning and an evaluation of learners’ experiences of using the technology and of its influence on learning”

In obtaining the measures of usability we will be able to draw on experience of the JISC-funded Subject Portals Project. (<http://www.portal.ac.uk/spp/documents/testing/>). A comparative evaluation from the Users perspective will be an ongoing research task, we will need to make comparisons at different stages with different groups of students as both technologies are changing. This gives deliverable:

D5 Report: User Comparison of PLLUGS with LUVLE

Deliverable D5 will, in the language of the call, “analyse areas in which the project has been more and less successful, highlighting the implications and challenges of implementing e-learning to support cross-institutional delivery of lifelong learning and an evaluation of learners’ experiences of using the technology, and of its influence on learning. These reports will also contain an explanation of how the detailed project outcomes will be of value to the JISC community”.

WP 6: Sakai Involvement/Engagement in the development of our tools

Charles Severance (Executive Director Sakai) will work with the project as a consultant in order to:

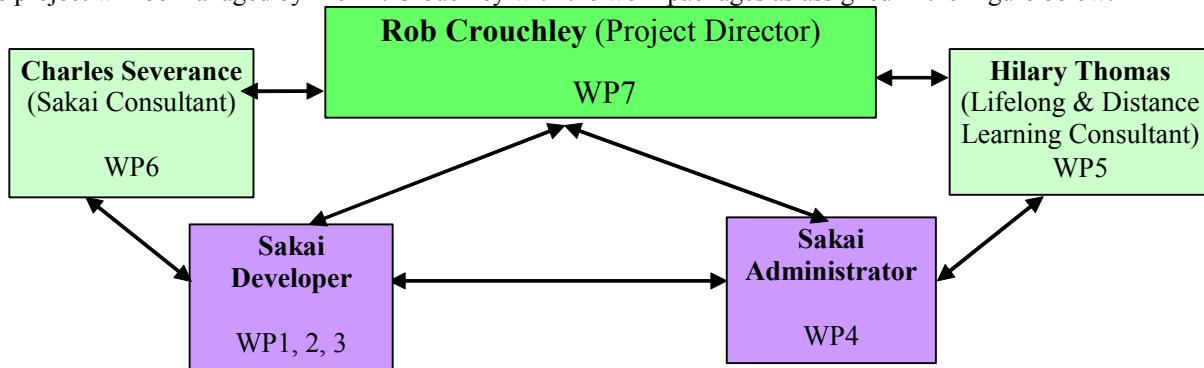
1. Ensure that the software developed as part of this project is usable by the broader Sakai community
2. Ensure that the Lancaster team is aware of and has access to any Sakai capabilities (such as RDF) which might accelerate the development of the software for this project
3. Provide technical assistance in understanding Sakai Architecture and technologies
4. Provide input on the use of Sakai for lifelong learning in the world wide community
5. Continuously review the software as it is developed, giving feedback and suggestions form the point of view of a domain expert in teaching and learning technology.

This gives the deliverable:

D6 Sakai Foundation involvement in the development of the project tools and support for their wider take up

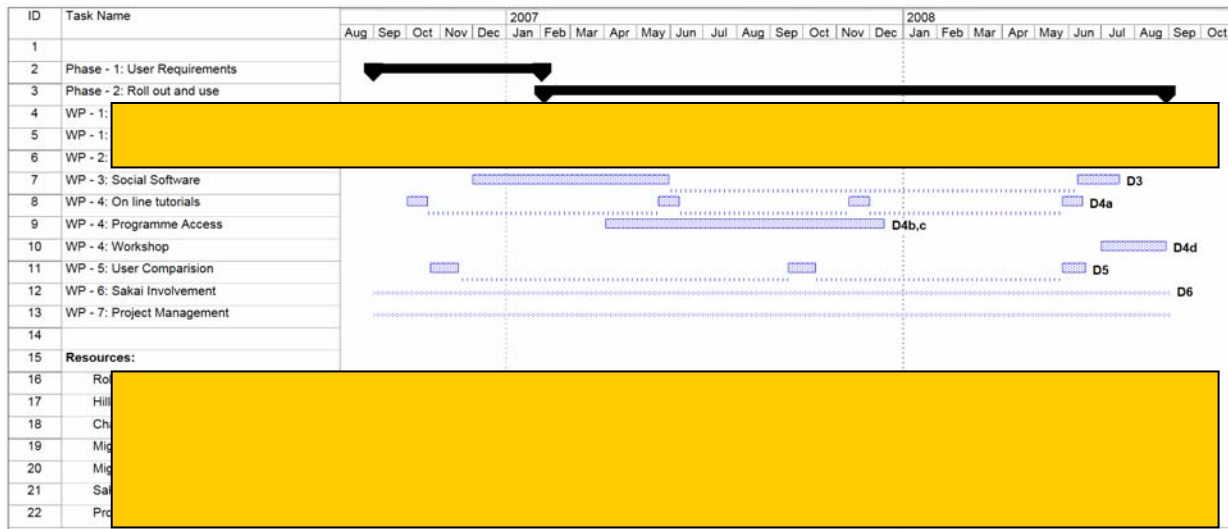
WP 7: Project management

The project will be managed by Prof R. Crouchley with the work packages as assigned in the Figure below.



There will be a monthly meeting of the project team (some will be via Access Grid and telephone conference). Between meetings, the Sakai Administrator will work directly with the CW students and tutors (end users) to address any account and software difficulties they may have.

The timelines for the various aspects of the project can be seen in the following diagram. **Text in diagram removed – Section 43 (Commercial Interests)**



Phase 1 Start up can be further broken down as follows: month 1, JISC website, hiring of the Sakai Developer, 1st project meeting, draft requirements and architecture document; month 2: project plan and consortium agreement in place (as required by JISC), project website, run CW worksites in Sakai with standard Sakai tools and meeting with users; months 3-6: more

requirements and architecture agreed.

PLLUGS is a technology focused demonstrator. Our aim is to embed our tools and services in the Sakai open source community to ensure their sustainability past the lifetime of this project. Developing versions of our tools and services for other desktop systems is beyond the scope of this project. The limited funds available for each bid under FEC in this call have prevented us from directly demonstrating the cross-institutional delivery of lifelong learning. At the end of the 1st year we will request further funding for a learner-focused cross institutional collaboration. We will make PLUGGS available to all the successful participants in the current call and ask for their feedback, see WP4. Also, the tools/services developed will be promoted within the Sakai community. Through Charles Severance, we know of several Sakai groups that are interested in cross-institutional delivery of life long learning, and will document their experience with our tools towards the end of the project.

Risks. These main risks are set out the Table below.

Factor	Likelihood	Impact	Strategy
Failure to recruit a Sakai Developer	Low	High	Junior staff will be seconded from other duties
Unrealistic task scheduling	Medium	Medium	The milestones will be shifted accordingly. Critical path analysis will be repeated
Users do not like the deliverables	Low	High	Other stand alone versions of tools with similar features are becoming popular it is very unlikely that users will not want the ease of use that comes with integrated versions
Sakai developer find the Sakai API too difficult to use	Low	High	Other teams already have considerable experience of the Sakai API and will be able to assist when needed

Of these, the principal risk is that users will not like the deliverables. We will mitigate this risk by agreeing a minimal set of useful features for PLLUGS with the users at the beginning of the project. They will be asked to evaluate prototypes at every possible opportunity and to participate in the documentation process. We will avoid excessive pressure on the development schedule by agreeing that a strong consensus will be needed to implement new features following the first full release.

IPR. We will license any software outputs under the Apache License Version 2.0. In brief, this allows any commercial or non-commercial exploitation of the software and is widely recognized as being one of the most liberal licenses in circulation. For the full license, follow this link: <http://www.apache.org/licenses/LICENSE-2.0>. We will also license any outputs other than software under the Creative Commons "Non-commercial No Derivatives" (by-nc-nd) license. Follow this link for more details: <http://creativecommons.org/licenses/by-nc-nd/>

(3) Budget

Table 3.1 below, contains the budget summary. In Table 3.1, Total FTE refers to the total time on the project over 2 years.

Staff

The staff roles are discussed in Section 4 (Key personnel).

Equipment

The PC and laptop are for the Sakai Developer and Administrator. The Server is to host the Sakai service for the CW students, tutors and wider community, it includes manufacturer support. The webcams/headsets are for the students.

Travel and Subsistence

Sakai Conference Visit: We request funding for two project members to attend the June and December Sakai project partners meeting in the USA in 2007/08 year of the project.

Travel: We request a travel budget for the project members to attend and present the work at various workshops and conferences.

Other Costs

Consumables: This is for marketing, stationery, photocopying, printing, telephone bills, CDs, back-up tapes, etc.

Software Licenses: This software is for producing the training materials, and for use by the Sakai Developer and Sakai Administrator.

Severance, Charles: The £6,000 pa down here is for his travel to the UK. His effort on this project has not been included as he is a resident of the USA.

Recruitment: This is for the Sakai Administrator post.

Learning material: We estimate that to produce the learning material (Impatica) of WP4 will require nearly 2 months effort by the LUCeS e-learning content developer.

Sakai Membership: The Sakai Partners Program (SPP) focuses on the needs of educational institutions that wish to adopt Sakai tools or to develop tools for inter-institutional portability. SPP provides partners with early information on the direction of the Sakai Project, strategic briefings to help plan for Sakai implementation at partner institutions, and discussions of the project roadmap. Partners get early access to Sakai documents and some pre-release software as well as technical support staff. Sakai conferences include developer training, strategy sessions, community planning, and other opportunities to connect with partner institutions. The Sakai Partners Program is the long-term sustainability organization for the Sakai Foundation. Each SPP Partner is required to pay an annual Partnership fee of \$10,000 (currently £6,900 approx.) to support the programme. We have membership from current grants that cover the 1st year. We therefore request funding for the 2nd year.

Table 3.1 PLLUGS, Budget by Project Year

			2006/07	2007/08	Total
Staff Costs:	Total FTE	Role			
- Crouchley, Rob	0.25	PI	XXXX	XXXX	XXXX
- Thomas, Hillary	0.20	CI	XXXX	XXXX	XXXX
- Gonzalez, Miguel	1.25	Tech	XXXX	XXXX	XXXX
- Database Administrator, ALC-2	1.00	Tech	XXXX	XXXX	XXXX
- Administrative/project Support CS4	0.20	Admin	XXXX	XXXX	XXXX
Total Staff costs			43,213	70,043	113,256
Non Staff Costs					
Equipment:					
- Desktop + flat panel Screen			842	0	842
- Laptop + flat panel Screen			1,004	0	1,004
- Additional flat Screens			667	0	667
- Server			3,560	0	3,560
- Webcams/Headsets			500	500	1,000
Total Equipment			6,573	500	7,073
Travel and Subsistence					
- Sakai Conference Visit			0	5,786	5,786
- Travel			2,044	2,106	4,150
Total Travel and Subsistence			2,044	7,892	9,936
Other Costs					
- Consumables			2,044	2,106	4,150
- Software Licences			766	789	1,555
- Severance, Charles			6,000	6,000	12,000
- Recruitment			504	0	504
- Learning material			2,555	2,633	5,188
- Sakai Membership			0	6,840	6,840
- Workshop			0	4,997	4,997
Total Other Costs			11,869	23,362	35,231
Total non-staff Costs			20,486	31,754	52,240
FTE Related Costs:					
- Estate Costs			4,079	6,738	10,817
- Indirect Costs			29,386	48,543	77,929
Total FTE Related Costs			33,465	55,280	88,745
Total Full Economic Costs			97,164	157,077	254,241
Institutional Contribution					54,317
Contribution sought from JISC					199,924

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Workshop: We will run a workshop at the end of the project to discuss generic e-learning issues that occur in the personalisation/off-line-ability of tools/services. This will give us the opportunity to demonstrate our tools to the wider community and get feedback from others on their work. To give the discussion persistence and make it available to e-learning technologists who were unable to attend, the workshop will be videoed, and made available online, (e.g. <http://redress.lancs.ac.uk/Workshops/Presentations.html>). The budget includes: travel accommodation, videoing and producing Impatica versions of all the presentations and discussion.

Qualitative Benefits to Lancaster and the Sakai Foundation.

Sakai Foundation. We repeat here some of the statements from Charles Severance’s letter of support. “To me one of the grand challenges of collaborative environments in e-learning is being able to tailor them to the way each Student or Tutor works.

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Lancaster. This project will enable us to pilot personalise-able e-learning technologies, produce use cases and requirements for lifelong learners and build capacity, knowledge and skills in use of e-learning. Much will depend on the results of the comparative evaluation of PLLUGS and LUVLE. If PLLUGS is shown to have clear benefits over LUVLE, then we would expect that the effectiveness of our teaching CW would improve and students would have an enhanced experience of distance learning. If this comparison can be generalised across the University, it will give us the confidence to take more control of our

e-learning destiny with Lancaster becoming more involved in open source e-learning software projects. What ever happens, this project will help Lancaster make more informed decisions on the use of e-learning.

(4) Key personnel

The project team will consist of: the **Project Manager**, Prof Rob Crouchley; **Lifelong, Distance and Flexible Learning Advisor**, Hilary Thomas; **Software Consultant (Sakai)**, Dr Charles Severance; **Sakai Developer**, Miguel Gonzalez; and a **Sakai Administrator** (to be advertised).

Project Manager, Prof Rob Crouchley, Centre for e-Science, Lancaster University. The main activities of Rob in this project are to ensure that the deliverables are on time and budget, via a detailed project plan and progress reports and to co-ordinate the work, see also WP7. Rob is involved in various EPSRC and JISC projects and developments and will ensure that the technology being developed is consistent with those of related developments in JISC and e-Science. Rob has been director of the Lancaster University Centre for e-Science since 2002. During this time he has made several presentations at International conferences, these have been on: VREs, e-collaboration tools in research and on resource discovery tools. Rob is involved in several grants from JISC, these include Resource Discovery in e-Social Science, <http://redress.lancs.ac.uk/>, Sakai VRE Portal Demonstrator, <http://tyne.dl.ac.uk/Sakai/>; VRE Programming Toolkit & Applications, <http://tyne.dl.ac.uk/GROWL/>. He also does some consultancy for JISC, e.g. JISC Information Environment Portal activity - supporting the needs of e-Research, led by Dr Rob Allan and the e-Research Tools and Resources Interoperability Study, (eReSS), led by Ian Dolphin. Rob also represents the ESRC on the JISC Committee for the Support of Research (JCSR). He was a key member (2003-04) of the JCSR spin off sub-committees Virtual Research Environments (VRE) which designed the JISC VRE I (£3.5M) programme.

Lifelong, Distance and Flexible Learning Advisor, Hilary Thomas, Dept of Continuing Education, Lancaster University, Programme Manager - Distance & Flexible Learning; [*currently also working as an advisor for a cross-campus e Learning project based in the Centre for the Enhancement of Learning and Teaching at Lancaster.*]The main activities of Hilary in this project are to ensure that the deliverables work for Lifelong, Distance and Flexible Learning in general and specifically for the various courses in Creative Writing. Hilary has a back ground in the development of learning and teaching and in distance education with a particular interest in networked learning and online communications, (MSc in Advanced Learning Technology). Her work in the area of distance learning with commercial organisations and industry led her to Continuing Education in the early 1990s, and to her involvement with a UFC funded research project at Lancaster, experimenting with the effectiveness of different media with non-traditional learners at a distance - from which point the Distance Learning programme in her Department had its origins. Conference presentations reflect Hilary's orientation towards meeting the social and affective needs of students to enhance their cognitive skills and creativity. Her main role on this project occurs in WP4 and 5. Hilary will oversee the online evaluative questionnaires on PLLUGS and LUVLE (administered by the Sakai Administrator) and synthesize the results. Hilary will also chair course specific user focus groups (using the Video conferencing tools) in which students and tutors discuss how their e-learning needs can be met within this project.

Software Consultant (Sakai), Dr Charles Severance, Chief Executive, Sakai Foundation, University of Michigan. Until recently Charles was the Chief Architect of the Sakai Project. Charles is involved in online collaboration systems for teaching and learning as well as e-Research. He is active in a number of standards activities including the IEEE POSIX (standards.ieee.org), IMS (www.imsglobal.org), and the Java Community Process (www.jcp.org). He is currently a member of the Expert Group looking at the next generation of the Portlet Specification JSR-286. His role was discussed in WP6.

Sakai Administrator. The duties of this new post will primarily involve the administration of a Sakai installation in support of the test bed courses. The administrator will also run our Community Service in which we make PLLUGS available to programme participants. He will also provide a limited level of support to this community, (see WP4 for more details of this). There will be a development element to the role, in the form of Sakai customisations and support of the Sakai Developer. The successful candidate will be responsible for all aspects of technical deployment, customisation and operational support of Sakai for the Distance learning Creative Writing courses at Lancaster University. These responsibilities will include working with existing support staff on project/capacity planning, development/production service deployment, and technical support for the course students and administrators. The successful candidate will have demonstrable skills in technologies such as Cascading Style Sheets (CSS), Java Server Pages, MySQL administration, Apache Tomcat administration and XML.

Sakai Developer. The main duty of this post is to develop or adapt tools, within the Sakai portal framework, **Text removed – Section 43 (Commercial Interests)**

. These tools will require a high degree of security and reliability, as well as a user-interface **Text removed – Section 43 (Commercial Interests)**

that are easy to access and use. The SD will be in post from the spring of 2007. The specific duties of the developer relate to WP1, 2, 3, which require the skills of an experienced developer. We have previously been unable to find these skills at lower than pt 12 on the ALC 2 scale. Miguel Gonzalez. Losa will be the named person for this role. Miguel is an experienced Java and C# programmer. He has worked on several successful academic software projects as well as owning his own consultancy in his native Spain. He obtained a Masters in Computer Sciences from the University of Oviedo (Spain) in 2003 and has been

helping to develop our suite of e-collaboration tools (Video, shared desktop, whiteboard, blog, etc) for nearly 18 months.

The project secretary will support the organization of the workshop and provide general secretarial duties to the project Staff.

“Staff costs in this proposal have been calculated using current pay scales. However, Lancaster University is currently in the process of agreeing new pay structures which will be introduced during the period of the proposed research.”

Appendix 1: Creative Writing at the School of Lifelong Learning and Widening Participation

The Creative Writing courses at Lancaster University provide a lifelong learning case study that fits in the project time frame of 2 years. This provides an excellent opportunity to measure the value added by the proposed development (PLLUGS) at several points in time. Other particularly useful features are:

1. An annual intake of around 250 students with mixed educational background and experience from all over the UK; ranging in age from 16-85.
2. Existing use of LUVLE (Lotus Domino) for distance learning.
3. A set of short courses, 3 to 6 month long, starting at up to 3 times year.
4. Extensive peer group interaction as part of the student centred learning ethos in CW. Students discuss their own and other students' writing on-line, as well as carry out workshop activities designed to stimulate ideas and develop writing skills.

The distance learning programme within the Department of Continuing Education (DCE in the School of LLL&WP) attracts students from a diverse set of backgrounds and with a diverse set of needs. Grouped together, such students can present a challenge, but if managed and facilitated well can generate some of the best opportunities for learning. Experience to date suggests that the ways in which students are enabled to connect with each other is significant in the learning outcomes of courses - and in the retention of students. Ease of use of learning tools, a sense of presence and shared experience are all factors that appear to influence how motivated and connected students feel to their course and their learning. For some students, there is already a sense that the CW programme of courses (both distance and face-to-face) provides the basis of a learning community from which they are able to draw support for a range of endeavours. Enhancing the ease with which this community is able to interact would bring with it a range of benefits.

The following short courses are offered for the comparison of LUVLE and PLLUGS, (NB these range in length and are offered up to 3 times a year):

1. Creative Writing (CW) levels 1, 2 & 3
2. Poetry, levels 1, 2 & 3
3. Writing your Novel, levels 1 & 2
4. CW – a short course
5. Poetry – a short course
6. Writing for Children

With this number of courses and tutors involved it will be possible to assess and evaluate the impact of PLLUGS within a range of scenarios for example, for:

- Students who are new to online learning
- Students who are familiar with LUVLE but not SAKAI
- Students who proceed from one set of learning tools to another within the duration of the project
- Tutors who are new to LUVLE
- Tutors who are familiar with LUVLE but not SAKAI
- Tutors who proceed from one set of learning tools to another within the duration of the project.

In addition, in order to assess the usability of tools with as wide a range of needs as possible, it is proposed to involve students grouped together for other projects, namely:

- 16-18 year old students as part of a developing online venture with The National Academy for Gifted and Talented Youth (NAGTY), see http://www.nagty.ac.uk/student_academy/index.aspx, NAGTY was established with a remit to co-ordinate the development and provision of education for the top 5% of the population, up to the age of nineteen. The Department of Continuing Education runs a programme of courses for NAGTY over the school breaks; recently this has extended to courses online. It is anticipated that further developments in this area will be taken forward in autumn 2006.

- Students over 50, who will be part of a new 'Senior Learners Initiative' hosted by DCE

Since for the most part none of these CW courses are 'content-based', that is, they do not rely on deposited resources; we propose to include in the project a course currently under development for the Department's Literature Certificate, which does rely more on resources. This will provide an opportunity to assess the use-ability of this aspect of PLLUGS against that of LUVLE.

Appendix 2: Sakai Background

The Sakai Project is a large-scale open source software development effort to design, build and deploy a new Collaboration and Learning Environment (CLE) for higher education. Sakai comes, out of the box; with a set of useful collaboration tools see http://www.sakaiproject.org/index.php?option=com_content&task=view&id=230&Itemid=473. All of the relevant pre-bundled tools will be provided for use by the CW students. The main learner centric ones are:

Discussion. A threaded discussion tool. The discussion threads are stored in a database and can be retained after break up of a learner group.

Chat. A textual chat tool. The chat messages are stored in the database for later analysis, if required.

Dropbox. A useful utility for sharing files just with the learner group administrator. Your fellow learners cannot view files placed in the dropbox.

Resources. An area where you can upload files for use by the group.

There are also other projects that are building learner centric tools that can be added to Sakai. Of particular relevance to lifelong learners is the OSPI, who are collaborating on the development of an open source electronic portfolio software system.

Extending Sakai

Text removed – Section 43 (Commercial Interests)

Sakai is also a development framework and can be extended through the plugging in of software components. The Sakai framework services layer provides services to these components such as the database and email service. These services can be wired into tools using an Inversion of Control (which prevents type coupling of components to services) type approach, or using an abstract factory approach, see above figure. Each Sakai service can be exposed via standard web services and thus used by software external to the Sakai application. This capability allows Sakai to be considered as a 'bag of services' and this description fits very neatly into JISC's vision of a Service Oriented academic computing environment.

The components are also developed in accordance with a style guide and thus are indistinguishable from the tools that come pre-installed; this makes for a comfortable user experience when using a Sakai worksite. The Lancaster collaboration tools are examples of such Sakai components; see WP3. LUCeS has been involved with Sakai from early in its development and has contributed software on several occasions.



22 June 2006

Ann Lloyd
JISC Executive
Northavon House
Coldharbour Lane
Bristol
BS16 1QD

JISC Circular 3/06: Appendix C *Cross-institutional use of e-learning to support lifelong learners*

Dear JISC

I am writing to express this University's strong support for the proposal to the above programme entitled "Personalisable Lifelong Learning User Group Software (PLLUGS)". Lancaster University has a strong commitment to the development of lifelong learning and research into, and use of virtual environments, which includes developments to enhance lifelong learning. This has been illustrated by its investment in Lancaster University's new School of Lifelong Learning and Widening Participation which took place in December 2005.

Furthermore, Lancaster University Computing Service five-year strategic plan (2004-2009) includes the aim of taking a leading role in the development of Virtual Research Environment(s) (VREs), both complementing and integrating with our current Virtual Learning Environment and Portal development strategies. The e-learning Project we are proposing in partnership with the Sakai Foundation (University of Michigan) is timely as it brings our commitment to developing Lifelong Learning and Virtual Environments together.

I wholeheartedly commend the University's participation in this project.

Yours sincerely

Prof Trevor McMillan
PVC for Research

Letter of Support from Charles Severance

June 15, 2006

Prof. Rob Crouchley
Centre for eScience
Lancaster University
Lancaster LA1 4YT



Dear Rob,

I am very excited to be a part of your Personalised Lifelong Learner User Group Software (PLLUGS) effort at Lancaster University. The reason that we built Sakai was to provide a stable teaching and learning platform that contained a set of basic tools. The goal has always been to enable the building of a set of highly innovative learning tools that provided capabilities to teachers and learner that we can only begin to imagine.

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While we need to limit this to a carefully constrained user group in the first instance so as to make progress and insure success, I am absolutely convinced that as we move forward that the software and approaches will move from the specific to the general and we will end up with a tool that has far reaching use in terms of the development of knowledge around a teaching and learning activity.

I look forward to working as part of your team going forward.

Sincerely,

A handwritten signature in black ink, appearing to read "Charles", followed by a horizontal line extending to the right.

Charles Severance
Executive Director
Sakai Foundation
University of Michigan
csev@sakaifoundation.org